TEXTRON Lycoming

Stratford Division
Textron Lycoming/
Subsidiary of Textron Inc.

550 Main Street
Stratford, CT 06497
203/385-2000

November 18, 1992

Ms. Colette Ready
State of Connecticut
Department of Environmental Protection
Water Management Bureau
122 Washington Street
Hartford, CT 06106

RE: Wastewater Pump Station Overflow

Dear Ms. Ready:

Per your request in our telephone conversation this morning, I have enclosed a description of the incident which resulted in a bypass of the normal wastewater treatment operations and a release of an unknown quantity of partially treated wastewater at the Textron Lycoming facility in Stratford, Connecticut.

Enclosed in the narration of the incident is a description of the function of the pump station and actions being taken to prevent a similar occurrence in the future.

If you have any further questions please call me at (203) 385-3741. Thank you.

Sincerely,

TEXTRON LYCOMING

James Runstadler
Manager Environmental Services

JR/bg
Enclosure

Wastewater Pump Station Overflow

The following is a description of the events caused by an equipment malfunction and associated accidental release of wastewater containing hexavalent chrome on Tuesday, November 17, 1992 at the Textron Lycoming Stratford Connecticut facility.

At approximately 1:15 PM on the afternoon of Tuesday, November 17, 1992 water was noticed coming out of one of the chemical waste treatment manholes outside of the plating department. An immediate investigation into the matter revealed that the transfer pump in the Chrome Pump Station was not operating. The pump was manually turned on immediately to prevent a further release of water.

The Chrome Pump Station collects treated wastewater from Building 70, the cyanide treatment facility, and untreated wastewater from the chrome line in the plating department. The Chrome Pump Station transfers this wastewater across the facility to the Chemical Wastewater Treatment Plant. From the treatment plant water discharges to a tidal basin connected to the Housatonic River.

Water that overflowed from the manhole adjacent to the pump station ran down a slight gradient to the nearest stormwater drain. This stormwater drain is connected to the facilities Oil Abatement Treatment Plant. Water from this treatment plant also discharges to the Housatonic River. A concern was raised as to the level of hexavalent chrome that may have been present in the wastewater that ran down the stormwater drain. Grab samples taken at discharge 007 from the Oil Abatement Plant at 1:30 PM showed a level of 0.4 parts per million out the discharge. By 3:00 PM the level had dropped to 0.05 ppm and by 4:30 PM, down to 0.02 ppm. A sample taken at 6:00 did not detect any hexavalent chrome. A composite sample of the discharge taken overnight also showed no hexavalent chrome present in the discharge. From the levels present in the Oil Abatement Plant discharge it is assumed that the wastewater from the pump station originally had a couple of parts per million chrome.

At approximately 4:30 PM a call was made to the DEP Water Management Bureau to report the incident. Since it was late in the day nobody was available to address the situation. A subsequent telephone call was made to the DEP Emergency Response Unit. A review of the situation was described both to the individual answering the call and later, to the field inspector.

A further review of why the pump failed to function was conducted by the maintenance department. Indications are that the bubbler system that controls the water level failed to turn on the transfer pump. Without the transfer pump running the pump station overflowed within a couple of hours. The bubbler system circuit had been shorted out and thus was not properly recording the water level in the pump station.

The design of the plant system is such that if the transfer pumps are shut down for an extended period of time, it is inevitable that the water will back up and overflow from the pump station. To prevent a reoccurrence of the problem the pump station and similar pump stations should be equipped with high level alarms to indicate overflow conditions. Consideration is also being given to the installation of back up pumps to transfer the wastewater in the event of a primary pump failure.